

R E M A R K S

Reconsideration of this application, as amended, is respectfully requested.

RE: CLAIM 1

As explained in the Background of the Invention portion of the specification of the present application, lenticular lens sheets are typically produced by rotating a roller member and pressing the roller member against a resin material, and the surface of such lenticular lens sheets unavoidably include minute undulations. (See page 2, line 23 to page 3, line 3.) And as also explained in the Background of the Invention portion of the specification of the present application, if lenticular lens sheets having mismatched undulations are joined, an optically adverse effect is produced. (See page 3, lines 4-8.)

Claim 1 has been amended to clarify that a region of the major surface of each of the optical sheet members to be joined according to the present invention includes undulations extending along the second direction. And significantly, claim 1 has been amended to clarify the feature of the present invention whereby the undulations of respective ones of the optical sheet members meeting at the joint surfaces have phases which are synchronized with each other so that optical properties of the joint surfaces

are substantially identical to each other within a predetermined permissible range, as supported by the disclosure in the specification at page 40, lines 11-24.

No new matter has been added, and it is respectfully requested that the amendments to claim 1 be approved and entered.

It is respectfully submitted, moreover, that the amendments to claim 1 are clarifying in nature only, and do not narrow the scope of the claims either literally or under the doctrine of equivalents.

RE: CLAIM 5

Claim 5 was rejected under 35 USC 112, second paragraph, because the Examiner asserts that it is unclear what the unit "S" is in claim 5.

In this connection, it is respectfully pointed out that according to the international ISO Standard, "Ra" is a unit of surface roughness representing the central line average roughness (in μm). And according to the Japanese JIS Standard, "Ra" is used to designate the central line average roughness (in μm), and "Rmax" is used to designate the maximum height of the surface roughness (in μm).

Accordingly, it is respectfully requested that the rejection of claim 5 under 35 USC 112, second paragraph, be withdrawn.

RE: THE PRIOR ART REJECTION

Claims 1-4 and 5-9 were rejected under 35 USC 102 as being anticipated by USP 5,206,761 ("Ogino"); and claim 5 was rejected under 35 USC 103 as being obvious in view of Ogino. These rejections, however, are respectfully traversed.

According to the present invention as recited in clarified amended claim 1, an optical sheet is provided which comprises optical sheet members which are substantially identical and which each have a major surface, and whose optical properties over the respective major surfaces vary cyclically along a first direction and are substantially identical along a second direction orthogonal to the first direction; wherein a region of the major surface of each of the optical sheet members includes undulations extending along the second direction; wherein said optical sheet is produced by joining the plurality of optical sheet members with respective end surfaces thereof, which are substantially perpendicular to the respective major surfaces thereof meeting each other as joint surfaces; and wherein the undulations of respective ones of the optical sheet members meeting at the joint surfaces have phases which are synchronized with each other so that optical properties of the joint surfaces are substantially identical to each other within a predetermined permissible range.

As described in the Background of the Invention and at page 40, lines 11 to 18 of the specification, it is not possible

to avoid some undulations over the surface of the optical sheet members 6. These undulations extend along the second direction of the optical sheet members (the direction along which the joint 7 extends in Figs. 20A-21D, for example). In addition, the optical sheet members 6 do not necessarily have undulations that match in direction or magnitude. If these undulations are not taken into account when matching the optical sheet members 6, the joint surfaces 6c of the optical sheet members 6 are optically mismatched. Consequently, the joint surfaces appear as a streak, for example, on the optical sheet.

Significantly, according to the present invention as recited in claim 1, the optical sheet members are selected for joining such that the undulations of respective ones of the optical sheet members meeting at the joint surfaces have phases which are synchronized with each other. For example, as shown in Fig. 20A and as described in the specification at page 41, lines 6-18, when the undulations have center portions which are angled in the same direction, the optical sheet members 6 are selected such that the respective magnitudes x and y of the undulations of the two optical sheet members satisfy the relationship $|x-y| < 2$ pitches. In this way, the optical properties of the joint surfaces are made to be substantially identical to each other within a predetermined permissible range, and the problem of streaking, for example, is overcome.

By contrast, it is respectfully submitted that Ogino merely discloses three lens sheets 1, 2 and 3, in which the Fresnel sheets 1 and 2 are formed by sheet members that are joined at junctions 9 and 10. In addition, Ogino merely discloses at column 3, lines 47-49, that the "refractive action of the Fresnel lens surfaces 5, 7 is substantially zero at around the junctions 9, 10, or the junctions are flat." In fact, it is respectfully submitted that Ogino does not at all disclose, teach or suggest the feature of the present invention whereby the undulations of respective ones of the optical sheet members meeting at the joint surfaces have phases which are synchronized with each other so that optical properties of the joint surfaces are substantially identical to each other within a predetermined permissible range. And indeed, it is respectfully submitted that Ogino does not even recognize that undulations are present on the lens surfaces along the second direction, or that these undulations cause a problem when the undulations of joined optical members are not properly matched. Accordingly, it is respectfully submitted that Ogino clearly does not at all disclose, teach or suggest the solution to this problem achieved according to the present invention as recited in clarified amended claim 1.

In view of the foregoing, it is respectfully submitted that the present invention as recited in amended independent claim 1,


as well as each of claims 2-9 depending therefrom, patentably distinguishes over Ogino, under 35 USC 102 as well as under 35 USC 103.

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Entry of this Amendment, allowance of the claims and the passing of this application to issue are respectfully solicited.

If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned at the telephone number given below for prompt action.

Respectfully submitted,



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